

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Flomerfelt et al.

Application No. 10/579,879

Filed: May 17, 2006

Confirmation No.

For: SPATIAL FOR ALTERING CELL
PROLIFERATION

FILED VIA EFS

Examiner:

Art Unit:

Attorney Reference No. 4239-64851-02

FILED VIA EFS
COMMISSIONER FOR PATENTS
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450

MISSING PARTS TRANSMITTAL LETTER

Enclosed for filing in the application referenced above are the following:

- ☒ Copy of Notification to Comply with Requirements for Patent Applications Containing Nucleotide and/or Amino Acid Sequence Disclosures dated January 4, 2007 (10 pages).
- ☒ Amendment to Insert Sequence Listing and Correct Sequence Errors (3 pages).
- ☒ Sequence Listing (14 pages).
- ☒ The fees associated with filing this Amendment and Response are being paid concurrently via EFS. The Director is hereby authorized to charge any additional fees that may be required, or credit over-payment, to Deposit Account No. 02-4550.

Respectfully submitted,

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By /Gillian L. Bunker/
Gillian L. Bunker, Ph.D.
Registration No. 47,461

214/68/104/1000



UNITED STATES PATENT AND TRADEMARK OFFICE

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U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/579,879	Francis A. Flomerfelt	42396485102

INTERNATIONAL APPLICATION NO.

PCT/US03/36874

I.A. FILING DATE

PRIORITY DATE

11/18/2003

36218

KLARQUIST SPARKMAN, LLP
 121 S.W. SALMON STREET
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 PORTLAND, OR 97204-2988

3/4/07, 7/4/07

COMP. *KCF*
 SEC. *md*
 SEC. *md*
 CO. *md*

CONFIRMATION NO. 4862

371 FORMALITIES LETTER



OC000000021831621

Date Mailed: 01/04/2007

NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

SUMMARY OF FEES DUE:

Total additional fees required for this application is **\$-250** for a Large Entity:

- This application clearly fails to comply with the requirements of 37 CFR. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing", an initial paper or compact disc copy of the "Sequence Listing", **as well as an amendment specifically directing its entry into the application.** Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.
- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 CFR 1.822 and/or 1.823, as indicated on the attached copy of the marked-up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

(A previous payment of **\$250** will be applied to the additional fees indicated above.)

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- **For Rules Interpretation, call (571) 272-0951**
- **For Patent Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.**
- **Send e-mail correspondence for Patent Software Program Help @ ebc@uspto.gov**

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.
<https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at <http://www.uspto.gov/ebc>.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

VONDA M WALLACE

Telephone: (703) 308-9140 EXT 225

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/579,879	PCT/US03/36874	42396485102

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/579,879
Source: IFWP
Date Processed by STIC: 5-31-06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06



IFWP

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/579,879

DATE: 05/31/2006

TIME: 13:23:45

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\05312006\J579879.raw

3 <110> APPLICANT: The Government of the United States of America, as
 4 represented by the Secretary of the Department of Health and
 5 Human Services
 6 Flomerfelt, Francis
 7 Gress, Ronald
 9 <120> TITLE OF INVENTION: SPATIAL FOR ALTERING CELL PROLIFERATION
 11 <130> FILE REFERENCE: 4239-64851-02
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/579,879
 C--> 13 <141> CURRENT FILING DATE: 2006-05-17
 13 <150> PRIOR APPLICATION NUMBER: PCT/US2002/036874
 14 <151> PRIOR FILING DATE: 2003-11-18
 16 <160> NUMBER OF SEQ ID NOS: 7
 18 <170> SOFTWARE: PatentIn version 3.3
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 933
 22 <212> TYPE: DNA
 23 <213> ORGANISM: Mus musculus
 26 <220> FEATURE:
 27 <221> NAME/KEY: CDS
 28 <222> LOCATION: (84)..(677)
 29 <223> OTHER INFORMATION: Coding sequence
 31 <400> SEQUENCE: 1
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 34 gaaacttggtg ttggaaccag ccc ctg ttt ctg ggg aat gta tat aag ggg agt 113
 35 Leu Phe Leu Gly Asn Val Tyr Lys Gly Ser
 36 1 5 10
 38 tta gca cct cgt agg gat gag gtg act agt cca aag gca gag ccc cag 161
 39 Leu Ala Pro Arg Arg Asp Glu Val Thr Ser Pro Lys Ala Glu Pro Gln
 40 15 20 25
 42 cca gag acg aag ccg gag aac ctt cca agg agc cac ggg gat gtt ggg 209
 43 Pro Glu Thr Lys Pro Glu Asn Leu Pro Arg Ser His Gly Asp Val Gly
 44 30 35 40
 46 ctc cag aaa gag act gtg gtc cca ggc att gtg gat ttc gag ctg atc 257
 47 Leu Gln Lys Glu Thr Val Val Pro Gly Ile Val Asp Phe Glu Leu Ile
 48 45 50 55
 50 cat gag gag ctg aag acc aca aag ccc caa aca tca caa cca aca ccc 305
 51 His Glu Glu Leu Lys Thr Thr Lys Pro Gln Thr Ser Gln Pro Thr Pro
 52 60 65 70
 54 agt gcc tac cgc ttt gga cgc cta agc cac cat tcc ttc ttc tcg agg 353
 55 Ser Ala Tyr Arg Phe Gly Arg Leu Ser His His Ser Phe Phe Ser Arg
 56 75 80 85 90
 58 cac cac ccc caa cca cag cga gtg act cat atc caa gat atc gct ggg 401
 59 His His Pro Gln Pro Gln Arg Val Thr His Ile Gln Asp Ile Ala Gly

Does Not Comply
Corrected Diskette Needed

CPg-5)

RAW SEQUENCE LISTING

DATE: 05/31/2006

PATENT APPLICATION: US/10/579,879

TIME: 13:23:45

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\05312006\J579879.raw

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62 aag cct gtc tgc gtg gtc agg gac gag ttc tct ctg tgc gcc ttg act      449
63 Lys Pro Val Cys Val Val Arg Asp Glu Phe Ser Leu Ser Ala Leu Thr
64          110          115          120
66 cag ccc aca ttc tta tcc cgc tgt ctg atg ggg atg ccc acc atc tct      497
67 Gln Pro Thr Phe Leu Ser Arg Cys Leu Met Gly Met Pro Thr Ile Ser
68          125          130          135
70 gtc ccc att ggg gat cca cag tcc aat cgg aac ccc cag ctt tct act      545
71 Val Pro Ile Gly Asp Pro Gln Ser Asn Arg Asn Pro Gln Leu Ser Thr
72          140          145          150
74 tct gac acc tgg agg aag aaa ctg aag gac ctg gct tcc cga gtg act      593
75 Ser Asp Thr Trp Arg Lys Lys Leu Lys Asp Leu Ala Ser Arg Val Thr
76 155          160          165          170
78 gtc ttc act aag gaa atc cag cca aag ccc gat gag gtt ggt gtt gca      641
79 Val Phe Thr Lys Glu Ile Gln Pro Lys Pro Asp Glu Val Gly Val Ala
80          175          180          185
82 caa aga atg gag cct aga aaa aaa agg cct tct taa gtctcccaaa      687
83 Gln Arg Met Glu Pro Arg Lys Lys Arg Pro Ser
84          190          195
86 tgctcagctg ctggcacggg aggggaagga ccctcataac ctggaagggtg acagcgaaaa      747
88 tcaaagaaac acaaaatcac acctagcaga gaaatccaag aagggttccc agaaacaccc      807
90 tctaaagcaa ctgttcccaa cctgtctaat gccttgaccc ttgaatacag tttctcacac      867
92 tgcagtaacc cctgcccccg aaataaaatt attttcatta ctacttcaaa aaaaaaaaaa      927
94 aaaaaa      933
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98 <211> LENGTH: 197
99 <212> TYPE: PRT
100 <213> ORGANISM: Mus musculus
102 <400> SEQUENCE: 2
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105 1          5          10          15
108 Glu Val Thr Ser Pro Lys Ala Glu Pro Gln Pro Glu Thr Lys Pro Glu
109          20          25          30
112 Asn Leu Pro Arg Ser His Gly Asp Val Gly Leu Gln Lys Glu Thr Val
113          35          40          45
116 Val Pro Gly Ile Val Asp Phe Glu Leu Ile His Glu Glu Leu Lys Thr
117          50          55          60
120 Thr Lys Pro Gln Thr Ser Gln Pro Thr Pro Ser Ala Tyr Arg Phe Gly
121 65          70          75          80
124 Arg Leu Ser His His Ser Phe Phe Ser Arg His His Pro Gln Pro Gln
125          85          90          95
128 Arg Val Thr His Ile Gln Asp Ile Ala Gly Lys Pro Val Cys Val Val
129          100          105          110
132 Arg Asp Glu Phe Ser Leu Ser Ala Leu Thr Gln Pro Thr Phe Leu Ser
133          115          120          125
136 Arg Cys Leu Met Gly Met Pro Thr Ile Ser Val Pro Ile Gly Asp Pro
137          130          135          140
140 Gln Ser Asn Arg Asn Pro Gln Leu Ser Thr Ser Asp Thr Trp Arg Lys
141 145          150          155          160

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/579,879

DATE: 05/31/2006

TIME: 13:23:45

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\05312006\J579879.raw

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144 Lys Leu Lys Asp Leu Ala Ser Arg Val Thr Val Phe Thr Lys Glu Ile
145                               165                170                175
148 Gln Pro Lys Pro Asp Glu Val Gly Val Ala Gln Arg Met Glu Pro Arg
149                               180                185                190
152 Lys Lys Arg Pro Ser
153                               195
156 <210> SEQ ID NO: 3
157 <211> LENGTH: 1035
158 <212> TYPE: DNA
159 <213> ORGANISM: Mus musculus
162 <220> FEATURE:
163 <221> NAME/KEY: CDS
164 <222> LOCATION: (84)..(779)
165 <223> OTHER INFORMATION: Coding sequence
167 <400> SEQUENCE: 3
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170 gaaacttggt ttggaaccag ccc ctg ttt ctg ggg aat gta tat aag ggg agt      113
171                               Leu Phe Leu Gly Asn Val Tyr Lys Gly Ser
172                               1                5                10
174 tta gca cct cgt agg gat gag gtg act agt cca aag gca gag ccc cag      161
175 Leu Ala Pro Arg Arg Asp Glu Val Thr Ser Pro Lys Ala Glu Pro Gln
176                               15                20                25
178 cca gag acg aag ccg gag aac ctt cca agg agc cac ggg gat gtt ggg      209
179 Pro Glu Thr Lys Pro Glu Asn Leu Pro Arg Ser His Gly Asp Val Gly
180                               30                35                40
182 ctc cag aaa gag act gtg gtc cca ggc att gtg gat ttc gag ctg atc      257
183 Leu Gln Lys Glu Thr Val Val Pro Gly Ile Val Asp Phe Glu Leu Ile
184                               45                50                55
186 cat gag gag ctg aag acc aca aag ccc caa aca tca caa cca aca ccc      305
187 His Glu Glu Leu Lys Thr Thr Lys Pro Gln Thr Ser Gln Pro Thr Pro
188                               60                65                70
190 agt gcc tac cgc ttt gga cgc cta agc cac cat tcc ttc ttc tcg agg      353
191 Ser Ala Tyr Arg Phe Gly Arg Leu Ser His His Ser Phe Phe Ser Arg
192 75                               80                85                90
194 cac cac ccc caa cca cag cga gtg act cat atc caa gtt aca gga aga      401
195 His His Pro Gln Pro Gln Arg Val Thr His Ile Gln Val Thr Gly Arg
196                               95                100                105
198 gag gac ctg gag cac tcc ctg ccc ctc acc acc tct ttc cag ctc ctt      449
199 Glu Asp Leu Glu His Ser Leu Pro Leu Thr Thr Ser Phe Gln Leu Leu
200                               110                115                120
202 caa gct cct ggg gtc cag ccc atg gat ctc act ccc tct gca gat atc      497
203 Gln Ala Pro Gly Val Gln Pro Met Asp Leu Thr Pro Ser Ala Asp Ile
204                               125                130                135
206 gct ggg aag cct gtc tgc gtg gtc agg gac gag ttc tct ctg tcg gcc      545
207 Ala Gly Lys Pro Val Cys Val Val Arg Asp Glu Phe Ser Leu Ser Ala
208                               140                145                150
210 ttg act cag ccc aca ttc tta tcc cgc tgt ctg atg ggg atg ccc acc      593
211 Leu Thr Gln Pro Thr Phe Leu Ser Arg Cys Leu Met Gly Met Pro Thr
212 155                               160                165                170

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/579,879

DATE: 05/31/2006

TIME: 13:23:45

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\05312006\J579879.raw

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214 atc tct gtc ccc att ggg gat cca cag tcc aat cgg aac ccc cag ctt      641
215 ile Ser Val Pro ile Gly Asp Pro Gln Ser Asn Arg Asn Pro Gln Leu
216                      175                      180                      185
218 tct act tct gac acc tgg agg aag aaa ctg aag gac ctg gct tcc cga      689
219 Ser Thr Ser Asp Thr Trp Arg Lys Lys Leu Lys Asp Leu Ala Ser Arg
220                      190                      195                      200
222 gtg act gtc ttc act aag gaa atc cag cca aag ccc gat gag ggt ggt      737
223 Val Thr Val Phe Thr Lys Glu ile Gln Pro Lys Pro Asp Glu Val Gly
224                      205                      210                      215
226 gtt gca caa aga atg gag cct aga aaa aaa agg cct tct taa      779
227 Val Ala Gln Arg Met Glu Pro Arg Lys Lys Arg Pro Ser
228                      220                      225                      230
230 gtctcccaaa tgctcagctg ctggcacggg aggggaagga ccctcataac ctggaagggtg      839
232 acagcgaaaa tcaaagaaac acaaaatcac acctagcaga gaaatccaag aagggttccc      899
234 agaaacaccc tctaaagcaa ctgttcccaa cctgtctaatt gccttgaccc ttgaatacag      959
236 tttctcacac tgcagtaacc cctgcccccg aaataaaatt attttcatta ctacttcaaa      1019
238 aaaaaaaaaa aaaaaa
241 <210> SEQ ID NO: 4
242 <211> LENGTH: 231
243 <212> TYPE: PRT
244 <213> ORGANISM: Mus musculus
246 <400> SEQUENCE: 4
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249 1                      5                      10                      15
252 Glu Val Thr Ser Pro Lys Ala Glu Pro Gln Pro Glu Thr Lys Pro Glu
253                      20                      25                      30
256 Asn Leu Pro Arg Ser His Gly Asp Val Gly Leu Gln Lys Glu Thr Val
257                      35                      40                      45
260 Val Pro Gly ile Val Asp Phe Glu Leu ile His Glu Glu Leu Lys Thr
261                      50                      55                      60
264 Thr Lys Pro Gln Thr Ser Gln Pro Thr Pro Ser Ala Tyr Arg Phe Gly
265 65                      70                      75                      80
268 Arg Leu Ser His His Ser Phe Phe Ser Arg His His Pro Gln Pro Gln
269                      85                      90                      95
272 Arg Val Thr His ile Gln Val Thr Gly Arg Glu Asp Leu Glu His Ser
273                      100                     105                     110
276 Leu Pro Leu Thr Thr Ser Phe Gln Leu Leu Gln Ala Pro Gly Val Gln
277                      115                     120                     125
280 Pro Met Asp Leu Thr Pro Ser Ala Asp ile Ala Gly Lys Pro Val Cys
281                      130                     135                     140
284 Val Val Arg Asp Glu Phe Ser Leu Ser Ala Leu Thr Gln Pro Thr Phe
285 145                      150                      155                      160
288 Leu Ser Arg Cys Leu Met Gly Met Pro Thr ile Ser Val Pro ile Gly
289                      165                      170                      175
292 Asp Pro Gln Ser Asn Arg Asn Pro Gln Leu Ser Thr Ser Asp Thr Trp
293                      180                      185                      190
296 Arg Lys Lys Leu Lys Asp Leu Ala Ser Arg Val Thr Val Phe Thr Lys
297                      195                      200                      205
300 Glu ile Gln Pro Lys Pro Asp Glu Val Gly Val Ala Gln Arg Met Glu

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/579,879

DATE: 05/31/2006

TIME: 13:23:45

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\05312006\J579879.raw

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304 Pro Arg Lys Lys Arg Pro Ser
305 225      230
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309 <211> LENGTH: 2117
310 <212> TYPE: DNA
311 <213> ORGANISM: Mus musculus
314 <220> FEATURE:
315 <221> NAME/KEY: CDS
316 <222> LOCATION: (40)..(1365)
318 <400> SEQUENCE: 5
319 aagaaaagaa ggagaataga ggagctgctg gctgagaaa atg gct gtt gat ggt      54
320                               Met Ala Val Asp Gly
321                               1           5
323 ggg tgt ggg gac act gga gac tgg gaa ggt cgc tgg aac cat gta aag      102
324 Gly Cys Gly Asp Thr Gly Asp Trp Glu Gly Arg Trp Asn His Val Lys
325                               10           15           20
327 aag ttc ctc gag cgg tct gga ccc ttc aca cac ccc gat ttc gaa cca      150
328 Lys Phe Leu Glu Arg Ser Gly Pro Phe Thr His Pro Asp Phe Glu Pro
329                               25           30           35
331 agc act gaa tca ctc cag ttc ttg tta gat aca tgt aaa gtt cta gtc      198
332 Ser Thr Glu Ser Leu Gln Phe Leu Leu Asp Thr Cys Lys Val Leu Val
333                               40           45           50
335 att gga gct ggt ggc tta gga tgt gag ctt ctg aaa aat ctg gca tta      246
336 Ile Gly Ala Gly Gly Leu Gly Cys Glu Leu Leu Lys Asn Leu Ala Leu
337                               55           60           65
339 tct ggt ttt aga cag att cat gtt ata gac atg gac act ata gat gtt      294
340 Ser Gly Phe Arg Gln Ile His Val Ile Asp Met Asp Thr Ile Asp Val
341 70                               75           80           85
343 tcc aat tta aat aga cag ttt tta ttt agg cct aaa gat gty gga aga      342
W--> 344 Ser Asn Leu Asn Arg Gln Phe Leu Phe Arg Pro Lys Asp Xaa Gly Arg
345                               90           95           100
347 ccc aag gct gaa gtt gct gca gaa ttc cta aat gac aga gtt cct aac      390
348 Pro Lys Ala Glu Val Ala Ala Glu Phe Leu Asn Asp Arg Val Pro Asn
349                               105          110          115
351 tgc aac gtg gtm cca cat ttc aac aag atw caa gat ttt aac gac act      438
W--> 352 Cys Asn Val Xaa Pro His Phe Asn Lys Xaa Gln Asp Phe Asn Asp Thr
353                               120          125          130
355 ttc tac cga caa ttt cat atc att gta tgt ggc ctg gac tct atc ata      486
356 Phe Tyr Arg Gln Phe His Ile Ile Val Cys Gly Leu Asp Ser Ile Ile
357                               135          140          145
359 gcg aga aga tgg atc aat gga atg ctg ata tct ctt cta aat tat gaa      534
360 Ala Arg Arg Trp Ile Asn Gly Met Leu Ile Ser Leu Leu Asn Tyr Glu
361 150                               155          160          165
363 gat ggt gtg ttg gat cca agc tcc att gta cct ttg ata gat ggg ggg      582
364 Asp Gly Val Leu Asp Pro Ser Ser Ile Val Pro Leu Ile Asp Gly Gly
365                               170          175          180
367 aca gaa ggc ttt aaa ggg aat gcc cga gtg att ttg cct gga atg acc      630
368 Thr Glu Gly Phe Lys Gly Asn Ala Arg Val Ile Leu Pro Gly Met Thr

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The type of errors shown exist throughout
the Sequence Listing. Please check subsequent
sequences for similar errors.

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/579,879

DATE: 05/31/2006
TIME: 13:23:46

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF4\05312006\J579879.raw

Error Explanation

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; Xaa Pos. 99,121,127,222
Seq#:6; Xaa Pos. 99,121,127,222

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/579,879

DATE: 05/31/2006

TIME: 13:23:46

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\05312006\J579879.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:344 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:5
L:344 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:342
L:352 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:438
L:376 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:726
L:511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:96
L:515 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:112
L:539 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:208